Application No.: 10/589,347 Docket No.: 2870-0342PUS1
Reply to Office Action of October 14, 2009 Page 2 of 7

## AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A detection method of detecting acquisition of [[the]] a drug resistance of a test cancer cell to anticancer drugs etoposides, which comprises

detecting the presence or absence of amplification of one or more types of genes selected from an ATP binding cassette (ABC) [[ABC]] transporter gene genes and BCL2 family genes consisting of ABCA3 gene, ABCB6 gene, ABCB8 gene, ABCB10 gene, ABCC4 gene, ABCC9 gene, ABCD3 gene, ABCD4 gene, ABCE1 gene, ABCF2 gene, BCL2L2, BCL2L10, BCL2L1, and BCL2A1, in said test cancer cell by

measuring the presence or absence of amplification of the ABC transporter gene in said test cancer cell, wherein said ABC gene is an A3(ABCA3) gene, and

judging that said test cancer cell has acquired a drug resistance to etoposides when amplification of the ABCA3 gene is detected in said test cancer cell.

## 2. (Cancelled).

- 3. (Currently Amended) The detection—nethod method according to claim 1, wherein detection is carried out by the CGH a comparative genome hybridization (CGH) method, [[the]] a flow cytometry method, [[the]] an ELISA method, [[the]] a DNA chip method, or [[the]] a quantitative PCR method.
- 4. (Currently Amended) The detection method according to claim 1, wherein detection is carried out by [[the]] a CGH method or [[the]] a DNA chip method.
- 5. (Original) The detection method according to claim 4, wherein a substrate used in the CGH method or the DNA chip method is a DNA fixed substrate wherein the DNA comprises one or more types of genes selected from ABC transporter genes and BCL2 family genes consisting of ABCA3 gene, ABCB6 gene, ABCB8 gene, ABCB10 gene, ABCC4 gene, ABCC9 gene, ABCD3 gene, ABCD4 gene, ABCE1 gene, ABCF2 gene, BCL2L2 gene, BCL2L10 gene, BCL2L1 gene, and BCL2A1 gene.

Docket No.: 2870-0342PUS1 Page 3 of 7

Application No.: 10/589,347 Reply to Office Action of October 14, 2009

6. (Original) The detection method according to claim 5, wherein said substrate is a DNA fixed substrate which further comprises one or more types of genes selected from ABC transporter genes, BCL2 family genes, and DNA synthesis-associated genes, which consist of ABCB1 gene, ABCC1 gene, ABCB11 gene, BCL2 gene, MCL1 gene, BCLXL gene, DCK1 gene, TOP1 gene, and TOP2A gene.

7. (Currently Amended) The method of detecting drug resistance-acquired cancer cells according to claim 4, which comprises:

allowing control DNAs and [[the]] a DNA of a test cancer cell used as a target of detection of acquisition of drug resistance, each of which was labeled with [[each]] a different fluorescent dye, to simultaneously contact with [[said]] a DNA-fixed substrate, so as to conduct hybridization; and

quantitatively detecting amplification or deletion of a specific region of [[the]] a test DNA by using the fluorescent dye obtained as a result of the hybridization as [[in]] an index.

- 8. (Currently Amended) The method of detecting drug resistance-acquired cancer cells according to claim 7, wherein the DNA fixed on said DNA-fixed-substrate, the test DNA, and the control DNA are genomic DNAs.
- 9. (Withdrawn) A DNA-fixed substrate on which DNA comprising one or more types of genes selected from ABC transporter genes and BCL2 family genes consisting of ABCA3 gene, ABCB6 gene, ABCB8 gene, ABCB10 gene, ABCC4 gene, ABCC9 gene, ABCD3 gene, ABCD4 gene, ABCE1 gene, ABCF2 gene, BCL2L2 gene, BCL2L10 gene, BCL2L1 gene, and BCL2A1 gene, is fixed.
- 10. (Withdrawn) The DNA-fixed substrate according to claim 8, on which several types of DNAs comprising one or more types of genes selected from ABC transporter genes, BCL2 family genes, and DNA synthesis-associated genes, which consist of ABCB1 gene, ABCC1 gene, ABCB11 gene, BCL2 gene, MCL1 gene, BCLXL gene, DCK1 gene, TOP1 gene, and TOP2A gene, are further fixed.

Application No.: 10/589,347 Docket No.: 2870-0342PUS1 Page 4 of 7

Reply to Office Action of October 14, 2009

11. (Withdrawn) The DNA-fixed substrate according to claim 9, wherein several types of DNAs that are to be fixed on the substrate are genomic DNAs, cDNAs, or synthetic oligonucleotides.

12. (Withdrawn) The DNA-fixed substrate according to claim 11, wherein several types of DNAs are genomic DNAs and wherein said genomic DNAs are gene amplified products of BAC DNA, YAC DNA, or PAC DNA.